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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/706,846	11/12/2003	Gregory B. Venema	4430-031234 (03-1257)	6084
7590	08/25/2005		EXAMINER	
Daniel C. Abeles, Esq. Eckert Seamans Cherin & Mellott, LLC Alcoa Inc., Alcoa Technical Center 100 Technical Drive Alcoa Center, PA 15069-0001			MORILLO, JANELL COMBS	
			ART UNIT	PAPER NUMBER
			1742	
DATE MAILED: 08/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/706,846	VENEMA ET AL.
	Examiner	Art Unit
	Janelle Combs-Morillo	1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 01 June 2005.
- 2a) This action is FINAL.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Heymes et al (US 2004/0182483).

Heymes teaches a process of manufacturing an aluminum alloy heat treatable product (such as 2xxx, 6xxx, 7xxx [0064]) by casting into an ingot, hot rolling into a plate, machining, solution heat treating said machined stock, quenching (see Heymes at claim 1), controlled stretching, and aging (Heymes at claim 2, 10), substantially as presently claimed in instant claims 1-4. Heymes teaches machining into near-net shape (see Examples, Fig. 1). Because Heymes teaches a process of working and heat treating identical to the instant process, it is held that Heymes anticipates the instant invention.

Concerning claim 5, Heymes does not specify any special temper for said flat plate product, and therefore teaches said product is in an as-fabricated temper (F-type temper) after hot rolling.

Concerning claims 6-8, Heymes teaches said process can be used to produce a structural element for a wing skin with integrated stiffeners (see[0067]).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt, Jr et al (US 5,221,377).

Hunt teaches a heat treatable Al-Zn (7xxx series) alloy product processed by casting into an ingot (column 5 lines 54-56), working (such as rolling column 5 lines 43-44) and optionally machining (column 5 line 60) to achieve the desired shape- such as a plate (column 5 line 45), solution heat treating (column 5 lines 61-63), stretching (column 6 line 9), and aging (column 6 line 13).

Hunt does not specify the order of the steps of working and machining to achieve the desired final shape. However, selection of any order of performing said process steps is *prima facie* obvious in the absence of new or unexpected results (see MPEP 2144.04), *Ex parte Rubin*, 128 USPQ 440 (Bd. App. 1959) (Prior art reference disclosing a process of making a laminated sheet wherein a base sheet is first coated with a metallic film and thereafter impregnated with a thermosetting material was held to render *prima facie* obvious claims directed to a process of making a laminated sheet by reversing the order of the prior art process steps.). See also *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results); *In re Gibson*,

39 F.2d 975, 5 USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.). Therefore because Hunt teaches a process of producing a heat treatable metal product with substantially the same process steps as presently claimed (and applicant has not shown the specific criticality of step c) removing material after step b) rolling, it is held that Hunt has create a prima facie case of obviousness of the presently claimed invention.

Concerning dependent claims 2-4, as stated above, Hunt teaches said alloy is an aluminum alloy that is categorized as a 7xxx series type (see Hunt at abstract). Hunt also teaches machining to achieve a desired shape (column 5 line 60), substantially as presently claimed.

Concerning dependent claim 5, Hunt does not specify said alloy is in the "F" temper after rolling. Because the instant specification states that the F temper means the temper of the alloy as fabricated (see [0006]), and because Hunt teaches no additional heat treatment or working steps occur, the product taught by Hunt is also in a F temper after rolling.

Concerning dependent claims 6-8, Hunt teaches said steps are suitable for use in a variety of aircraft components, including wing components, wing box components, wing sections, fuselage sections, etc. (column 18 lines 50-53). Therefore the presently claimed skin and stiffening members in the wing panel is held to be within the disclosure of Hunt.

### ***Response to Arguments***

5. In the response filed on June 1, 2005, applicant submitted various arguments traversing the rejections of record.
6. The examiner has not received a 1.131 affidavit showing the instant invention pre-dates the date of Heymes.

7. Applicant's argument that the present invention is allowable over the prior art of record because the instant specification has clearly shown unexpected results with regard to removing material prior to solution heat treating has not been found persuasive because there is "no adequate basis for reasonably concluding that the great number and variety of compositions included in the claims would behave in the same manner as the tested composition" *In re Lindner*, 457 F.2d 506, 509, 173 USPQ 356, 359 (CCPA 1972). While the claimed invention is broadly drawn to any heat treatable aluminum alloy, the results in the specification are drawn to AA7085. Whether the unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, the "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support." In other words, the showing of unexpected results must be reviewed to see if the results occur over the entire claimed range. *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. "ASM Handbook: Vol 4 Heat Treating" p 854 mentions a general process of heat treating and machining (see 3<sup>rd</sup> column).

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janelle Combs-Morillo whose telephone number is (571) 272-1240. The examiner can normally be reached on 8:30 am- 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCM  
August 22, 2005

ROY KING  
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